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ABSTRACT

Compiled to give readers information on current research in household production, this special issue focuses on the family as a provider of goods and services. It includes five feature articles, a summary of a survey of American farm women, and a brief analysis of sources of time-use data for estimating the value of household production. Covered in the first article is the household and farm task participation of women. The work load of married women is also examined. Measuring household production for the Gross National Product is the subject of the next article. Also discussed is the relationship of time, dual careers, and household productivity. New methods are described for studying household production. The final feature article deals with the issue of whether or not the modern housewife is a lady of leisure. Also included are a summary of a study on the use of time in rural and urban families and data on food costs in various regions of the United States. (MN)

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Special Issue: Household Production

Farm Women's Tasks

Married Women's Workload

Measurements for the GNP

Dual Careers

New Research Methods

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Family Economics Review

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Through the years Family Economics Review has brought to its readers information on various topics of family resource allocation, management, and use. In this issue we focus on the family as a producer of goods and services.

During the past several years, home economists and economists have rediscovered the enormous contributions that families make to themselves, and to the economy as a whole, through their productive efforts in the home. Home production contributes to the economic stability and security of families by helping to moderate the effects of changes in the market.

This special issue was compiled to give our readers information on current research in household production. One article, written in 1929 by a home economist in the U.S. Department of Agriculture, was included in the issue to provide an insight into the long term importance of household production. Other articles provide information from recent data sources. Highlights are included on various methods of studying work in the home and on time-use data used in household production research. The CRIS report in this issue provides information on the regional research project on the use of time by rural and urban households. This recent data collection will be used by State researchers for future studies in household production.

Household and Farm Task Participation of Women

By Kathleen K. Scholl
Consumer economist

The labor of farm women was first studied at the turn of the century. When the strenuous work performed by farm women became apparent, the initial time-use studies turned to work simplification research. Easier methods were developed for the work performed in the home and on the farm. For example, basic principles of leverage and proper lifting of heavy loads, whether tubs of wet laundry or bales of hay, were promoted in educational programs for farm women.

Mechanization of farm and household tasks and attempts to shorten time spent in chores led to research in time management (8). From the twenties through the sixties, time-use studies were conducted to examine the farm women's allocation of time between farm and household tasks.

In the fifties, time studies using time diaries became expensive to collect. Research on farm women's labor turned to studies of task involvement and the division of labor between husband and wife on household and farm tasks.[1] In the first such study, tasks were classified as shared or individual. More recent studies, including the 1980 National Farm Women Survey, focused on the frequency, rather than the sharing, of tasks on the farm and in the farm home.

Farm Women Studies

Early time-use studies showed that most farm women performed farmwork as well as household work. A study in Oregon in 1926-27 (13) indicated that approximately 18 percent of the homemaker's work time was spent in farmwork (table 1). The farm homemaker spent most of her time in homemaking work and a small proportion in gainful employment. Activities associated with dairy,

[1]Several States participated in the current NE-113 Regional Project, Use of Time in Rural and Urban Families (see "Current Research Reports" on p. 36). This time-use study in 1977-78 used time diaries. The study, however, did not contain an adequate number of farm families for analysis nor were the tasks divided in sufficient detail to study farm task participation.

poultry, and fruits and vegetables accounted for 85 percent of the farmwork done by women. Farm homemakers generally worked longer hours than nonfarm homemakers because this farmwork was in addition to their household work.

In a study of New York farm families in 1936 (9), 11 percent of women's work time was devoted to farmwork, 86 percent in household work, and 3 percent in other work.[2] The homemakers did more farm and other work in summer and fall than in winter and spring. The total workday of the farm homemaker, however, did not vary with the seasons; less time was spent on homemaking activities in order to do the other work. Homemakers tended to spend less time in household work if they were active in the community, did a great deal of farmwork, or were gainfully employed.

[2]The New York definition of "other work" included time spent in gainful employment, but also included time spent in activities such as gardening. This may account for some of the differences between the studies.

A few time-use studies examined differences among rural, urban, and farm homemakers. The results of these studies varied some research (6) indicates that farm homemakers spent more time in household work than other types of homemakers; other research (5) indicates no difference other than the time farm homemakers spent in farmwork.

Studies in the fifties examined the division of labor in city and farm families. A Michigan study (1) found that farm women performed a larger share of household tasks than city women, but this finding was not confirmed in a later study of Iowa farm, rural nonfarm, and city families (2).

Data were collected in 1962 from Wisconsin farm families concerning farm- and household-task participation. In general, the husband did fieldwork tasks, and the wife did most of the domestic and financial tasks. Barn chores and household maintenance tasks were shared by both spouses (7, 12). Wisconsin farm families, in a 1979 survey (10, 11), showed a similar division of labor, although an increase in the range

Table 1. Work time of farm homemakers in Oregon and New York

Work time	Oregon 1926-27[1]		New York 1926[1]	
	Hours	Percent	Hours	Percent
Homemakers reporting farmwork		97.0		79.0
Time used in total work.....	63.8	100.0	60.7	100.0
Homemaking	51.6	80.9	51.9	85.5
Farmwork	11.3	17.7	6.8	11.2
Other work	[2] 0.9	1.4	[3] 2.0	3.3

[1]Years of data collection.

[2]Includes gainful employment of the homemaker and time she spent assisting with the work of others for which they receive pay.

[3]Includes time spent in gainful occupation and activities such as gardening and pet care.

Sources: Warren, Jean, 1940, Use of Time in Its Relation to Home Management, Bulletin 734, Laboratories in Home Economics, Agricultural Experiment Station, Cornell University, Ithaca, N.Y. Wilson, Maud, 1929, Use of Time by Oregon Farm Homemakers, Oregon Agricultural Experiment Station Bulletin No. 256, Oregon State Agriculture College, Corvallis, Oreg.

of the wife's tasks was not matched by the husband's involvement in additional household tasks. Wives on diary farms contributed more in farmwork than wives on nondairy farms, especially on small farms. Off-farm employment of the husband increased the need for the wife's involvement on the farm. When the wife was employed off the farm, she decreased her farm chores and fieldwork; off-farm employment, however, did not change her responsibility for keeping the farm records. Wives were more deeply involved in farm tasks during early stages of the family life cycle than in the later stages.

In a 1980 Florida study (3), farm women were asked to recall the major tasks performed throughout the year. Although this method is less accurate than the time-use diary method, the study provides recent information on the task participation of farm women. The work contributed by farm women complemented, rather than competed with, the work of farm men. Farm men did the strenuous farm tasks, while women did farm tasks that require physical dexterity, patience, stamina, and nurturing. Farm men did the tractor work, cared for and marketed crops and livestock, and did farm repair work. Farm women kept records, cared for crops and animals, and ran errands.

The U.S. Department of Agriculture conducted the 1980 National Farm Women Survey (4) which measured the frequency of participation of women in both farm and household tasks. (See abstract on p. 9 for a more detailed description.) Until 1980, no data of any kind had been collected on a national level.

The 1980 National Farm Women Survey indicated that, in all farm operations sizes, women were actively involved in farm tasks and management of the farming enterprise. The involvement of women on the farm was so extensive that 55 percent of the women considered themselves main operators of their farms; almost 60 percent of the married women reported that they could run the operation without their husbands.

The proportion of farm women performing a task depended on the nature of the task and whether the task was done on the farm operation (table 2). As a regular duty, women reported doing household tasks, taking care of a vegetable garden or animals for the family's food consumption, looking after children, keeping financial records, and running farm errands. Half or more of the farm women reported that they occasionally cared for farm animals, harvested crops or other products--including the operation of machinery or trucks--, and supervised the farmwork of other family members.

The data indicated differences by region, age, and marital status of the farm woman. Farm women in the South were likely to report doing fewer farm tasks than women in other regions. Although 96 percent of the women were married, women who were not married at the time of the interview were involved in a greater range of farm tasks than were women who were married.

Farm women increased their farm involvement during childbearing and child-development years and reduced their farm involvement over the years when their children were grown. Usually one or more of three basic reasons are given for the relationship between woman's age and farm task participation: (1) Young women have more strength and are physically able to do more work than older women; (2) as children grow and mature, they take over farm tasks of the woman; and (3) resource inputs are needed at the early stages of economic development of both the farm and family--the woman, realizing that the farm unit supports and provides economic wealth for the family, contributes labor to farm tasks to make the farm a profitable and viable economic unit. Any or all of those three reasons could account for the women's gradual decrease in farm task participation after midlife. Men's farm task involvement, however, would be expected to parallel women's if only reasons (1) and (2) were true. Perhaps on beginning farm operations, both spouses realize that high debt and the lack of working capital require the involvement of the woman in the farm tasks until cash flow is sufficient for hiring additional labor, or until the farm man becomes more experienced.

Table 2. Women's involvement in farm and household tasks, 1980

Tasks	Regular duty	Occasionally	Never	Total	N[1]
			Percent		
Farm					
Plowing, disking, cultivating, or planting	11	26	63	100	2,257
Applying fertilizers, herbicides, or insecticides	5	12	83	100	2,377
Doing other fieldwork without machinery	17	25	58	100	2,281
Harvesting crops or other products, including running machinery or trucks	22	29	49	100	2,351
Taking care of farm animals, including herding or milking dairy cattle	37	29	34	100	1,944
Running farm errands, such as picking up repair parts or supplies	47	38	15	100	2,483
Making major purchases of farm or ranch supplies and equipment	14	23	63	100	2,455
Marketing farm products--that is, dealing with wholesale buyers or selling directly to consumers	15	18	67	100	2,380
Bookkeeping, maintaining records, paying bills, or preparing tax forms for the operation	61	17	22	100	2,489
Supervising the farmwork of other family members	24	26	50	100	2,060
Supervising the work of hired farm labor	11	25	64	100	1,643
Household					
Taking care of a vegetable garden or animals for family consumption	74	14	12	100	2,350
Doing household tasks like preparing meals, housecleaning	97	2	1	100	2,499
Looking after children	74	13	13	100	1,846
Working on a family or income business other than farm or ranch work	34	13	53	100	1,139

[1]All respondents (2,509) are not included. Respondents who reported that a particular task was not done on the farm operation or for their household were excluded.

Source: Jones, Calvin, and Rachel A. Rosenfeld, 1981, American Farm Women: Findings From a National Survey, NORC Report No. 130, p. 18, National Opinion Center, Chicago, Ill.

What Farm Women Are Doing

Generalizations about the task participation of farm women are limited because of the lack of replication among the studies of farm women and the incompatible geographic areas surveyed. The studies, however, can be examined for trends and similarities.

Farm women produce large quantities of food for their families. Household production in the form of raising vegetables and livestock for family consumption was reported in the 1980 National Farm Women Survey as a regular task by 74 percent of the women and as an occasional task by 14 percent. In the 1979 Wisconsin survey (10), 84 percent of the families reported producing meat and 92 percent producing vegetables for family consumption. In the Florida survey (3), families produced an average of 64 percent of their meat and 78 percent of their vegetables.

Keeping financial accounts for the farm operations is a main farm task of women on the farm; more than three-fourths of the women in the 1980 National Farm Women Survey reported bookkeeping as a regular or occasional task. Data from the two Wisconsin surveys indicated that between 1962 and 1979 farm women became more highly involved in keeping farm records. Differences among surveys in methods of data collection prevent the determination of whether this trend continued in 1980.

Running errands is an important task for a farm operation, especially during harvest and planting seasons. When machinery breaks, the function usually must continue while a replacement is sought. The farm woman, who is located in or near the production unit, is usually able to run the errand, which often requires the retrival of manuals, warranties, and other printed materials from the files. Also, the farm woman must have sufficient technical and mechanical expertise to return with the correct replacement part, especially in isolated rural areas. The task of "running and fetching" must be considerable since 85 percent of the women in the 1980 National Farm Women Survey reported this as a regular or occasional duty.

Findings from the Wisconsin surveys indicated that a few more wives did fieldwork in 1979 than in 1962. That trend also is evident in the 1980 National Farm Women Survey; physical labor was reported by many women. Slightly over 10 percent of the farm women reported plowing, disking, cultivating, or planting as a regular duty; 5 percent reported applying fertilizers, herbicides, or insecticides as a regular duty; and 17 percent reported that they regularly did fieldwork without machinery. The percentages of women almost doubled in these categories for 1980 when asked if they occasionally helped with the fieldwork tasks.

Farm women are heavily involved on farm enterprises with livestock. In livestock operations, women utilize their skills in caring for animals. Often this ranges from caring for flocks of chickens and herds of goats to tending large drylots of cattle. The appearance of special programs, such as farrowing courses for women, indicates the recognition of women's nurturing skills. In the Florida study (3), more women than men reported caring for animals. In the 1980 National Farm Women Survey, two-thirds of the farm women reported that caring for farm animals was either a regular or an occasional task.

Little information is available on the involvement of women in direct marketing of farm produce. Only a third of the farm women in the 1980 National Farm Women Survey reported that they marketed their farm products. This task category included both wholesale and retail marketing and was not analyzed separately for fruit and vegetable enterprises that often sell their produce directly to the consumers. Possibly women may be operating these fruit stands and "pick-your-own" operations; the data, however, do not contain sufficient detail to confirm or deny the involvement of women.

Implications

Farm women are involved in their family's farming operations through labor participation and make an economic contribution to both the farm unit and the family unit. Although the major responsibility of the woman is caring for the home and children, her farmwork is supportive of the farm unit since she is occasionally involved in almost half the farm tasks.

Results from all the studies of task participation of farm women indicate that those women need specialized instruction and information to improve the quality of farm life. Because half the farm women supervise the farmwork of other family members, they need not only broad, general agricultural information but also need knowledge of specific techniques.

Educational programs for farm women should be offered at times when they can attend, and with services provided to free them of other responsibilities. Child care services might be essential for the participation of young farm women. Offering programs at times that do not conflict with off-farm employment of women might also be important. In local areas, seasonal off-farm employment could conflict with the times known as "slack or slow" farming periods, when many programs usually are given.

According to data from the 1980 National Farm Women Survey, farm men often are unaware of the degree of involvement of women in tractor and mechanical operation. Their unawareness could result in physical injury to the woman or damage to the machinery if she has not been properly instructed in its operation. Classes in tractor maintenance should be offered to the farm woman. The most basic instruction of the mechanical functions of farm implements would be helpful because the farm woman runs errands for various mechanical parts. Also, farm safety classes should include farm women because the farm operation is their work environment, and the chance of injury may increase as women operate farm implements that are not designed for their physical stature and capabilites.

Traditionally, management classes have been presented separately for the farm and home units. Farm women should be invited and included in farm management programs with special emphasis on coordinating work between the home and farm. Other financial management information needed by farm women includes accounting, electronic record keeping, tax form preparation, and joint ownership property laws.

Research is needed on work simplification of farm tasks that women perform on a regular basis. For example, high-labor enterprises, such as dairy farms, often depend on farm women's labor. Dairy farms have tasks that are repetitious and would be excellent targets for work-simplification research.

Farm women should be encouraged to participate in horticulture programs. Their work encompasses tasks beyond the food preservation activities normally associated with the farm woman. Women plan, plant, cultivate, harvest, and preserve vegetables, small fruits, and tree fruits for food. Farm women need information on selection of planting site, soil analysis, control of weeds and pests, and use of plant residues.

Farm women have been receptive to animal husbandry courses designed to capitalize on the skills of women. Program-planning committees should identify the need for similar local programs for farm women. Special courses could go beyond calving and farrowing to the general health care and maintenance of livestock.

Is the farm woman, perhaps, an agricultural resource that has been neither fully recognized nor fully developed? The 1980 National Farm Women Survey has documented her contributions to agriculture and to family life. On the results of that survey, program-planning committees could base a dynamic program that would meet the expanded educational needs of the modern farm woman. The personal benefits from such programs may include an enriched farm life and enhanced contribution to the individual farm operation. If the full potential of all farm women was reached, farm families, farm operations, and U.S. agriculture would benefit.

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Survey of American Farm Women

Interviews in 1980 with over 2,500 farm women and over 550 farm men (mostly husbands) comprise the most extensive effort undertaken by the U.S. Department of Agriculture (USDA) to study farm women on a national level. Data were collected on several dimensions of farm women's involvement in their own farming operations, including their participation in farmwork, decision-making responsibilities, memberships in agricultural organizations, and a variety of personal attitudes and beliefs about their roles as farm women. Data were also collected on farm women's involvement with USDA programs and the agencies that administer them. In the survey, open-ended questions were asked regarding what the USDA could do to help farm and ranch people, specifically farm women.

The farm women in the survey had spent an average of two-thirds of their lives working or living on farms. Almost half the women (on operations where the specific tasks were done) regularly do the bookkeeping, raise food for the family, and run

farm errands. A sizable proportion of the women are at least occasionally involved with other types of farm tasks, including fieldwork. Farm women are involved in a range of farming decisions, but rarely make these decisions alone. Almost half the women belong to at least one agricultural organization. One-third are employed off the farm, with one-fourth of them reporting that they work to provide money for the farm. Farm women are quite satisfied with farming as a way of life and with the communities where they live. The women are not satisfied with farming as a way to make a living.

Analysis of the USDA data on program participation indicated that farm women are substantially less involved in farm programs than are male farm operators. With few exceptions, proportionately fewer women than men reported being familiar with and knowledgeable about programs and being personally involved in the application processes or business dealings with the agencies. The reasons farm women gave for this difference failed to demonstrate that women perceived themselves as victims of unfair or unequal treatment on the basis of their sex from USDA personnel. Rather, the farm women's program involvement was influenced by their husbands' participation in the USDA programs and women's own participation in the work and management of their farming operations.

Economic issues, especially price levels for farm commodities, were by far the most commonly cited problems by both men and women with which USDA could help farm and ranch people. When asked what USDA could do for farm women, over one-third of the women did not have a response. Of those women who did answer, changing inheritance laws and estate taxes ranked the highest, followed by improving or providing educational and informational programs for women, helping women by helping their husbands, and providing wider recognition of farm women's roles, especially their economic contributions.

Source: Jones, Calvin, and Rachel A. Rosenfeld, 1981, American Farm Women: Findings from a National Survey, National Opinion Research Center, Chicago, Ill.

Workload of Married Women

By Colien Hefferan
Economist

Many aspects of women's roles have changed dramatically during the past 50 years. Today there are more working wives than full-time homemakers. Many women are entering jobs previously held only by men. Women are electing to have fewer children and, in some cases, delaying the birth of their first child. Labor-saving devices, convenience foods, and other technological innovations are widely available to aid women in the tasks associated with homemaking. Perhaps most importantly, a large and growing segment of society professes values that are reflected in an egalitarian division of responsibilities in the home.

These changes in women's roles have significantly altered the way married women divide their working hours between categories of household work and between unpaid household work and paid employment. Despite these changes, married women, on average, continue to work about the same total hours per week as married women have worked for more than 50 years. In some cases, however, such as the full-time employed mother of young children, the total hours worked may be considerably above average. What factors influence the amount of time married women devote to different types of work? How do the workloads of today's married women affect the economic status of their families?

Historical Overview

Between 1929 and 1966, the time nonemployed married women devoted to household work remained remarkably stable--about 52 to 56 hours per week (7, 8). During that period, however, there was a shift in household time use toward more time in managerial and family-care activities and

less time in food preparation and cleanup and in other housecleaning activities.

The shift away from physical housecleaning activities continued into the seventies (5). Time spent in dishwashing and clothing care decreased significantly, while time spent in shopping, management, and nonphysical family care increased.

Household time studies in the seventies marked the first significant downturn in the amount of time married women spent in household work (1, 5). In 1975, nonemployed married women spent an average of 44 hours per week in household work, and employed married women spent about one-half as much time (1). The decrease in household work time for nonemployed, as well as employed, married women, suggests that factors such as changing family composition, work patterns of other family members, household technology, and personal standards influenced time spent in household work; however, there is not sufficient research to support that hypothesis. Most of the general downward trend in household production time has been attributed to the increasing number of married women working for pay.

Married women's participation in the paid labor force has increased dramatically. Fifty years ago only one in eight married women was gainfully employed. Today more than one-half of all married women work for pay; three-fifths of those 16 to 44 years of age are employed (see table 1). The labor force participation rates of married women with children under 18 have also increased rapidly. In March 1980, 62 percent of all married women whose youngest child was 6 to 17 years old and 45 percent of those whose youngest child was under age 6, were working. Overall, the labor force participation rate of married women with children under 18 was 54 percent in 1980, compared with 28 percent in 1960. Participation rates for married mothers of childbearing age (16 to 44 years) were slightly higher.

Table 1. Labor force participation rates of all married women and those of childbearing age, by presence and age of children, March 1960, 1970, and 1980

Married women	1960	1970	1980
16 years and over, total	30.5	40.8	50.2
No children under 18 years	34.7	42.2	46.1
With children under 18 years:			
Total	27.6	39.7	54.2
Youngest 6 to 17 years	39.0	49.2	61.8
Youngest under 6 years	18.6	30.3	44.9
16 to 44 years, total	31.6	43.7	60.3
No children under 18 years	58.4	66.6	78.8
With children under 18 years:			
Total	(1)	38.6	54.8
Youngest 6 to 17 years	40.3	51.0	64.9
Youngest under 6 years	(1)	30.4	45.0

[1]Not available.

Source: U.S. Department of Commerce, Bureau of the Census, 1981, Population Profile of The United States, P-20, No. 363.

An increasing proportion of employed married women work in full-time jobs. Today about 71 percent of all employed married women work fulltime, compared with 66 percent in 1960 (9, 11).[1] Despite this increase in full-time work, married women workers are still more likely to hold a part-time job than are women workers in general, and more than six times as many are likely to work part time as are married men. Estimates of the weekly hours of work for all employed married women indicate that they work about 34 hours per week. Married women working part time average slightly less than 20 hours per week in paid employment, and married women working full time spend slightly more than 39 hours per week in paid employment (11).

The total workload of married women is comprised not only of unpaid household work and paid employment, but also of volunteer work, commuting, and certain required work breaks. Surveys conducted by the Institute for Social Research at the University of Michigan indicate that the time married women devoted to all work activities combined dropped from 57 to 50 hours per week between 1965 and 1975 (3). This overall decline in total workload was the result of reported declines in the hours of both household work and paid employment, as well as minor changes in other work activities.[2]

The workload of married women apparently declined more dramatically than that of married men, resulting in a convergence of the total workloads of married men and women (6). For example, employed, married women, who historically have consistently reported the most hours of work of all family members, significantly reduced their total work time from 67 hours per week in 1965 to 55 hours in 1975. In 1965, employed married women worked 7 hours more per week than men. In 1975, employed, married men worked 2 hours more per week than women.

Results of the Michigan surveys indicate that the total workload of married women has changed over time but also suggest that at any one time, married women's workloads widely differ. In both 1965 and 1975, estimates of the total workload of married women varied considerably by women's employment status and family characteristics.

Factors Influencing Workloads

The single most important factor influencing married women's workloads is employment status. Averages indicating the total number of hours married women work in unpaid household work, paid employment, volunteer work, commuting, and work breaks, conceal a great deal of variation among full-time, part-time, and nonemployed women. In 1975, the total workload of full-time employed, married woman was 64 hours per week, compared with 53 hours for part-time workers, and 45 hours for those not employed. Although all groups of married women have slightly reduced their workloads over time, full-time employed wives continue to carry the heaviest total workload of all family members.

The prospects for sustaining a heavy workload over a long period of time are great for some employed, married women. Women in professional and managerial positions, who have heavily invested in education and training, are more likely to stay in the labor market than are women in other occupations. Even when there are young children in the home, these women are likely to work. As more married women enter

[1] Full-time workers are persons who usually work 35 or more hours per week.

[2] Separate estimates of time used in unpaid household work and paid employment may not add up to agree with survey estimates of the total amount of time used in all productive work. The methods used to collect data vary slightly among the sources, and the definition of total workload is more inclusive than unpaid household work and paid employment combined.

these occupations, their total workload probably will remain heavy.[3]

The amount of time married women spend in unpaid household labor, as well as their likelihood of participating in the paid labor force, is strongly related to the age of the youngest child and the number of children in the household (12, 13). Among families in which the youngest child is less than 1 year of age, nonemployed homemakers spend as much as 70 hours per week in unpaid household work. In families in which the youngest child is 12 to 17 years of age, nonemployed homemakers spend less than 50 hours per week in household work. Even in households with working mothers, the time spent in household work remains high in families with very young children, averaging as many as 50 hours per week.

Number of children has a greater impact on hours of household work than age of children. Married women with one or two children spend significantly less time in household work than women with three or more children. Declining family size could result in a decreased household workload for married women. Analysis of the Michigan surveys, however, shows that although the birthrate dropped sharply between 1965 and 1975, the time spent in child care decreased little, suggesting that, on a per child basis, child-care activities increased during the decade (3).

Results of the Michigan surveys, coupled with the increased labor force participation rates of married women of childbearing age, indicate that many married women may be responding to smaller family size by increasing the amount of time they spend with each child or increasing paid employment, or both. These actions act to maintain, and sometimes lengthen, the workweek of married women with children.

The workload of married women is affected by the amount of work other family members do in the home and, to some extent, by the labor force activities of other family members. Spouses tend to spend 1.5 to 2 hours per day in household work, compared with married women's 6 to 8 hours (5, 13). In large families and in families with young children, spouses devote slightly more time to household work. In families with teenagers, children contribute about 2 hours per day to household work. There is little evidence that spouses and other family members have significantly increased their participation in household work during the past decade.

Researchers have focused a great deal of attention on the relationship of household technology and standards of maintenance to the workload of married women. The hypothesis that advancing technology has reduced the workload of married women is supported only in the area of laundry (4, 5). Innovation may result in more efficient and less time-consuming production in some aspects of household work, but the net result apparently is a shift to nontechnological activities, such as child care, and increased standards of performance for household work, such as cleaner clothes.

Economic Contributions of Married Women's Work

Married women contribute about 70 percent of all the economic value of household work performed in their families.[4] Those contributions vary according to the employment status of the homemaker, the number of children in the household, and the age of the youngest child. The percent contribution of married women in different family

[3]There is evidence that the occupational distribution of women has shifted over the past 3 decades. In 1978, about 22 percent of employed women held professional and managerial jobs, compared with 17 percent in 1950. A drop in the percent of women who work in private household service has been offset by an increase in the percent who hold other service jobs. The largest single category in which women are employed continues to be clerical, accounting for more than one-third of all women's jobs (10).

[4]Weighted average of estimates is presented in table 2.

Table 2. Married women's share of the dollar value of all household work done in families, by age,[1] number of children, and employment status

Age (years)	Percent contribution		Age (years)	Percent contribution	
	Employed wife	Nonemployed wife		Employed wife	Nonemployed wife
Wife with no children:			Wife with children:		
25	72	86	4 children, youngest--		
25-39	72	83	12-17	71	86
40-54	84	80	6-11	74	78
55 and older	80	73	2-5	(2)	79
			1	(2)	78
Wife with children:					
1 child, 12-17	64	71	5-6 children, youngest--		
			12-17	(2)	(2)
2 children, youngest--			6-11	(2)	72
12-17	67	75	2-5	(2)	80
6-11	70	68	1	(2)	(2)
2-5	68	78	less than 1	(2)	79
3 children, youngest--			7-9 children, youngest--		
12-17	61	79	6-11	(2)	(2)
6-11	70	73	2-5	(2)	73
2-5	(2)	79			
1	(2)	76			

[1]Some age groups omitted because sample size was 0.
[2]Sample size fewer than 4 cases.

Source: Calculated from estimates in Gauger, William H., and Kathryn E. Walker, 1980, The Dollar Value of Household Work, Information Bulletin 60, Cornell University, Ithaca, New York.

types is shown in table 2. Nonemployed married women generate about three-fourths of the economic value of household work in their families, and employed married women generate about two-thirds of this nonmoney income.

Working wives contribute, on average, about 26 percent of family money income. Those who work full time, 12 months per year, contribute 40 percent of family income; part-year, full-time workers contribute about 30 percent. Part-time women workers contribute 11 percent of family income (12).

The economic status of families is greatly enhanced by multiple earners. Multiearner families enjoy incomes that are about 40 percent higher than incomes of single-earner families and experience a very low incidence of poverty (12). Families with two earners are better protected from the risks of unemployment than are single-earner families and are more likely to enjoy a wide array of work-related benefits. Researchers have demonstrated that although two-earner families have some added expenses, the adequacy of their income is greatly enhanced by the work effort of second earners (2).

The workload of married women produces major economic contributions to their families both in nonmoney and money income and in enhanced economic security. A growing number of married women may be providing more than one-half of total family income through their contributions to unpaid household work and their market earnings.

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Measuring Household Production for the GNP[1]

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For many women, homemaking is their full-time job and lifetime occupation. For many other women and men with paid jobs in the marketplace, work in the home absorbs many hours a week. Official government statistics, however, recognize neither homemakers as "workers" nor the value of unpaid work in the home as a component of national production.

In mid-1978, the Bureau of Economic Analysis (BEA), U.S. Department of Commerce, initiated a program for the measurement of nonmarket activities, such as household work and the services that are provided by consumer durables. Those measurements should provide users of the Gross National Product (GNP) statistics with the information they need to formulate alternative estimates of national income and production. Although that work at BEA has been phased out, the preliminary estimates of the dollar value of household work have been completed and are presented in this paper.

MEASUREMENT OF THE VALUE OF HOUSEHOLD WORK

The preliminary estimates of the dollar value of household work developed at BEA are the product of reported hours of household work and a value per hour. Reported hours are based on a survey of time use of U.S. households conducted in 1975-76 by the Survey Research Center (SRC) of the University of Michigan (5).

Reporting and defining hours. In the SRC survey, respondents reported, in diary format, the time spent in different activities during the previous day. Estimates presented here are based on data for the synthetic[2] week for the 1,391 respondents and spouses for whom data were complete. For calculation of aggregate hours and values, average hours from the survey were multiplied by the number of women and men 18 years of age or older in the civilian, noninstitutional population.

From the many uses of time (activities) reported in the SRC survey, household work activities were isolated by two criteria: (1) Activities that result in the production of a good or service that could be purchased in the market; and (2) activities that could be accomplished by a "third person" with no diminution of their "final utility" to household members.

The definition of household work used by BEA is similar to that used in the 1977-78 time-use study (NE-113) funded by the U.S. Department of Agriculture (2). (For information on NE-113, see "Current Research Projects," p. 36). In its definition of household work, however, BEA included (1) time spent in hobbies (e.g., woodworking) that produce goods and (2) time spent in volunteer work.[3] The SRC estimates show that in two-parent, two-child families daily household work hours were about 6.1 for women and 2.0 for men. Preliminary results from the NE-113 study show that in two-parent, two-child families daily household work hours ranged from 6.6 to 7.6 for women and from 1.6 to 2.4 for men. The estimate for women was lower in SRC than in NE-113, at least in part, because fewer families

[1]This article is condensed from a paper presented at the Agricultural Outlook Conference in November 1981 at Washington, D.C. Complete copies are available from the Family Economics Research Group (see p. 2 for address).

[2]Four separate time diaries for different days of the week were collected from each household between October 1975 and September 1976. These were used to create a profile of time use in a typical (synthetic) week, consisting of at least a Saturday, a Sunday, and one weekday.

[3]Some types of volunteer work cannot be separated from household work in the SRC data. Moreover, the value of volunteer work should be added to GNP along with the value of unpaid work in the home, hence its inclusion in BEA's estimates.

with a child aged 1 year or less were included in the SRC sample. The SRC and NE-113 estimates are not directly comparable at this time because the NE-113 estimates are not weighted to reflect State populations.

Valuing hours. In the BEA estimates for use in the GNP, hours of household work are valued by the wage rates of market (paid) workers who perform similar tasks. This valuation technique is called "specialist cost" because each type of household work (e.g., meal preparation or cleaning) is valued by the wage rate of an appropriate specialist (e.g., cook or cleaner). Consequently, the hourly value of household work varies by type of work (see table 1), but does not vary between women and men in any given type of work.

Considerable uncertainty is associated with the measurement and valuation of household work. Three problems are important. First, the efficiency of the household worker may be greater or less than that of the market worker and/or the product may be of better or poorer quality. As a result, the value of the household work could be understated or overstated. Second, there is considerable "joint production" in household work. For example, if a woman is cooking and talking to children at the same time, only one activity is reported as the primary time use when, in fact, there are two products: a cooked meal and cared-for or educated children. Third, the value of the product of household work is understated relative to the market cost of the product. This follows because only labor costs in the form of market wages are used to value the household work, whereas market costs include expenses and profits in addition to wages. On balance, it is uncertain whether the value of household work is understated or overstated. These problems, however, indicate that it is understated unless household workers perform less efficiently or do lower quality work than market workers.

Because of this uncertainty over valuation, BEA developed a range of estimates using alternative valuation techniques.[4] In addition to the specialist-cost technique, the alternatives include the housekeeper-cost technique, in which all hours of household work are valued by the wage rate of private household workers; and opportunity cost techniques, in which hours of work are valued by the wage that the person doing the household work could have earned by working an extra hour in the market. BEA used three alternative opportunity-cost techniques: (1) Gross compensation, which can be interpreted as the social-opportunity cost of the household work; (2) after-tax compensation, which adjusts for Federal and State marginal income tax rates; and (3) net compensation, which adjusts for taxes but also for commuting and for child care expenses. Techniques (2) and (3) are estimates of private opportunity costs. The alternatives result in values of household work that bracket specialist-cost values.

VALUE OF HOUSEHOLD WORK IN 1976

In 1976, the value of household work of adults in the United States, based on the specialist-cost valuation technique, totaled $752.4 billion, or 44 percent of GNP. Alternative valuations ranged from $540.0 billion to $1,015.4 billion (see table 2). For the average adult the housekeeper-cost valuation was 28 percent less than the specialist-cost valuation. The valuation based on gross compensation was 35 percent higher; the valuation based on after-tax compensation was 15 percent higher, and the valuation based on net compensation was almost identical with the specialist-cost valuation. (These comparative patterns are quite different for women than for men because women's market wage (compensation) rates, and consequently their opportunity costs, are lower than men's.) The estimates emphasized in the remainder of this paper are based on the specialist-cost valuation technique.

Women are the principal household workers, as shown in table 3. In 1976, they accounted for 68.4 percent of the total value of household work. Average household work of women totaled 1,756 hours a year or

[4]For further discussion of valuation techniques, see box in "New Methods for Studying Production," p. 33.

Table 1. Market equivalent occupations and wage rates for each type of household work

Type of household work	Market equivalent occupations	Market wage[1]	Weight[2]	Weighted average wage
		Dollars		Dollars
Meal preparation	Cooks (eph)[3]	3.54	.9605	
	Cooks (ph)[3]	2.28	.0395	3.49
Meal cleanup	Waiters/waitresses	3.27	.7899	
	Dishwashers	3.47	.1338	
	Busboys	3.93	.0763	3.35
Cleaning and gardening	Maids/servants (ph)	2.26	.1557	
	Cleaning service workers	4.39	.4341	
	Gardeners/groundskeepers	4.84	.0626	
	Miscellaneous laborers	4.83	.1482	
	Farm laborers	3.04	.1832	
	Dressmakers/seamstresses	3.98	.0162	3.90
Laundry	Laundresses (ph)	2.43	.0165	
	Laundry and drycleaning workers	3.66	.4470	
	Clothing ironers and pressers	3.69	.5365	3.66
Home repairs and hobbies	Painters	6.38	.1390	
	Painters' apprentices	5.52	.0009	
	Carpenters	6.82	.3979	
	Carpenters' apprentices	5.49	.0051	
	Auto body repairmen	5.83	.0496	
	Auto mechanics	5.34	.3781	
	Auto mechanics' apprentices	4.80	.0017	
	Roofers and slaters	6.68	.0277	6.13
Child care and instruction	Child care workers (ph)	2.04	.6568	
	Child care workers (eph)	3.09	.2972	
	Welfare service aids	4.34	.0460	[4]2.46
	School monitors	4.83	.1642	
	Teacher aids	3.91	.8358	[4]4.06
Shopping and other	Messengers	4.47	.0270	
	Housekeepers (eph)	4.35	.0490	
	Housekeepers (ph)	2.62	.0470	
	File clerks	4.58	.1742	
	Bookkeepers	4.83	.7031	[5]4.65
	Nursing aides	3.55	.8562	
	Health aides	4.04	.1438	[5]3.62

[1]Wage rates in 1969 are average annual earnings divided by average weeks worked and average hours per week (11). The wage rates are adjusted to 1976 levels on the basis of the rise in average hourly earnings from 1969 to 1976 for various industry divisions (12).

[2]Weights are the 1970 percentage of workers in each specific occupation relative to all workers in each type of household work. For example, there were 819,674 workers in occupations "equivalent" to meal preparation. Of these, 787,309 were cooks (eph). Thus the weight for cooks (eph) is 787,309/819,674 = .9605 (11).

[3]The designations (eph) and (ph) stand for "except private household" and "private household."

[4]Weighted average wage rates were calculated separately for child care and for child instruction. The separate estimates were combined into a single type in this article.

[5]Weighted average wage rates were calculated separately for several of the activities in shopping and other. The separate estimates were combined into a single type in this article.

33.8 hours a week. The value of those work hours was $6,694 a year.

Women continue to specialize in household work despite their increased participation in the labor force. Of their average total weekly work hours of 51.4, paid market work and related commuting accounted for 17.7 hours as compared with the 33.8 hours of work in the home.

In contrast, men specialize in paid market work. Of their average total weekly work hours of 50.0, paid market work and related commuting accounted for 34.9 hours as compared with 15.1 hours of work in the home. Nonetheless, men's work in the home is considerable, and in 1976, its value averaged $3,475.

Type of Household Work

The activities that make up household work are extremely varied, ranging from the rather methodical task of meal cleanup to the more complex tasks of financial management, child instruction, and home repair. For women the three most time-consuming activities were meal preparation, cleaning and gardening, and shopping and other (see table 3). Each absorbed more than 7 hours a week; together they totaled 24.2 hours a week, almost three-quarters of all household work hours. Child care and instruction accounted for another 4.1 hours a week. In these data, child-care hours include only hours in which child care is the primary activity. Many more hours are spent in contact with children during joint production. The average annual value of each type of women's household work ranged from $1,961 for shopping and other to $227 for home repairs and hobbies; the aggregate annual value for each type of activity ranged from $150.9 billion to $17.5 billion.

Of the 15.1 hours spent in household work, men averaged 5.5 in shopping and other. The average annual value of each type of men's work ranged from $1,322 for shopping and other to $23 for laundry; the aggregate annual value for all men ranged from $90.2 billion to $1.6 billion.

Clearly, men and women specialize in the types of household work that they do. Men accounted for 77.7 percent of the value of home repairs and hobbies. Women accounted for 95.7 percent of the value of laundry work; more than 80.0 percent of the values of meal preparation, meal cleanup, and child care and instruction; and 62.6 percent of the value of shopping and other.

Table 2. Alternative values of household work in 1976

[Billions of dollars]

Population group	Market cost valuation		Opportunity cost valuation		
	Housekeeper cost[1]	Specialist cost	Gross compensation[2]	After-tax compensation[3]	Net compensation[4]
Adults	540.0	752.4	1,015.4	865.0	751.8
Women	386.4	515.0	608.1	522.5	433.2
Men	153.6	237.4	407.3	342.5	318.6

[1]Based on hourly compensation rates of private household workers.

[2]Hourly compensation rates are based on earnings and hours reported on the Survey Research Center survey, adjusted for supplements to earnings. For those with no reported earnings, compensation rates are based on compensation by age, sex, and education characteristics.

[3]Gross compensation less estimated marginal Federal and State income taxes.

[4]Hourly after-tax compensation less average expenditures per hour of work for child care and commuting and the value of an hour of commuting time. All child care expenditures are attributed to women.

Table 3. Hours and value[1] of household work in 1976

Type of work	Total for all adults[2]				Average per adult		
	Annual hours		Annual value		Weekly hours	Annual hours	Annual value
	Billions	Percent	Billion dollars	Percent			Dollars
Adults:							
All work	188.8	100.0	752.4	100.0	25.0	1,300	5,180
Women:							
All work	135.1	100.0	515.0	100.0	33.8	1,756	6,694
Meal preparation	29.0	21.5	101.2	19.7	7.3	377	1,316
Meal cleanup	9.4	7.0	31.5	6.1	2.4	122	409
Cleaning and gardening	35.2	26.1	137.5	26.7	8.8	458	1,787
Laundry	9.7	7.2	35.6	6.9	2.4	127	463
Home repairs and hobbies	2.8	2.1	17.5	3.4	.7	37	227
Child care and instruction	16.3	12.1	40.8	7.9	4.1	211	531
Shopping and other[3]	32.7	24.2	150.9	29.3	8.1	425	1,961
Men:							
All work	53.7	100.0	237.4	100.0	15.1	786	3,475
Meal preparation	5.6	10.4	19.7	8.3	1.6	83	289
Meal cleanup	1.3	2.4	4.3	1.8	.4	19	63
Cleaning and gardening	13.1	24.4	50.9	21.4	3.7	191	745
Laundry	.4	.7	1.6	.7	.1	6	23
Home repairs and hobbies	9.9	18.4	60.6	25.5	2.8	145	888
Child care and instruction	3.9	7.3	10.0	4.2	1.1	58	146
Shopping and other[3]	19.5	36.3	90.2	38.0	5.5	285	1,322

[1]Household work is valued by specialist cost.

[2]The relative importance of each type of work differs somewhat for values as opposed to hours because the specialist cost valuation technique assigns different hourly values (wage rates) to each type of work. Work on home repairs and hobbies was assigned the highest wage rate, hence its share of value was greater than its share of hours; child care and instruction was assigned the lowest wage rate, hence its share of value was less than its share of hours.

[3]Other consists mainly of bill paying, recordkeeping, and volunteer work.

Women's Household Work by Various Characteristics

The average value of household work masks many variations across women, depending for example on their employment status, number of earners in their family, presence of children, age, and own earnings. These estimates are shown in table 4. The estimates should be interpreted cautiously for two reasons. First, the sample on which the estimates of hours are based is small. Second, no attempt is made to control for correlations among variables. For example, a woman's age is correlated with the presence of children in the household. Consequently, some of the variables discussed may not be significant determinants of the value of a woman's household work when they are considered simultaneously with other variables.

Employment. Employment has a major effect on the allocation of time. Declines in leisure time, sleep, volunteer work, and household work have been traced to employment in the market (8, 9, 10, 14). The important effect of employment is not surprising given the large block of hours that market work requires, whether employment is full time or part time.

A woman's household work in 1976 averaged 42.6 hours a week when she was not employed, 31.4 hours when she was employed part time, and 20.1 hours when she was employed full time (see table 4). The shift from nonemployment to full-time employment roughly halved weekly hours in household work. Those raw data undoubtedly overstate the effect of employment on household work because other variables are ignored; for example, employment is correlated with the presence of fewer and older children, which also reduces household work.

Each type of household work shared in this decline in weekly hours as a result of employment. Child care declined the most in percentage terms, shopping and other the least. Cleaning and gardening declined more than meal preparation and cleanup.

Yet, even for a woman employed full time, hours in household work remained sizable. All work hours (in the home, in the market, and in job-related commuting) totaled 66.9 a week for a woman working full time and 52.2 a week for a woman working part time.[5] Consequently, an employed women had considerably fewer nonwork hours--for leisure activities, for example--than did a nonemployed women.

The value of a woman's household work fell with household work hours. It totaled $8,405 a year when she was not employed, $6,243 when she was employed part time, and $4,040 when she was employed full time.

The effect on the household of this decline in an employed woman's hours of household work might be offset in three ways: (1) The woman might accomplish the work more efficiently, that is, in less time; (2) other household members might increase their household work hours; and (3) market-purchased goods or services might be substituted for the unpaid household work. Apparently, no evidence is available concerning the relative efficiency of employed and nonemployed women. On point 2, the evidence shows very little added household work by husbands when the wife is employed (1, 9, 14). On point 3, the evidence seems to show no important substitutions of paid help for ordinary household care; however, paid child care does seem to increase significantly and restaurant meals may also increase (4, 6, 10). The share of household expenditures going to services does increase with employment of women, but that, apparently, is accounted for by increased work-related expenses of employed women, not by the substitution of market goods and services for unpaid household work (13). Thus, the evidence seems to show that goods and services provided by household work are lower in homes where the women is employed than in homes where she is not employed, and further that the

[5] A man working full time averaged somewhat lower total hours: 62.9 a week, including 11.6 in household work. A man's commuting time averaged almost 1 hour a week more than a woman's and a man's market work averaged about 4 hours more, perhaps because of more overtime, more second jobs, and more job-related travel, all of which are included in market work hours.

Table 4. Average value[1] of a woman's household work in 1976, by various characteristics

Characteristic	Number in sample	Weekly hours of household work	Annual value of household work							
			Total	Meal preparation	Meal cleanup	Cleaning and gardening	Laundry	Home repairs and hobbies	Child care and instruction	Shopping and other
			Dollars							
All women	793	33.8	6,694	1,316	409	1,787	463	227	531	1,961
Employment status:										
Not employed	367	42.6	8,405	1,668	508	2,351	612	282	695	2,289
Employed part time	245	31.4	6,243	1,189	381	1,570	397	234	520	1,952
Employed full time	181	20.1	4,040	814	256	1,000	268	113	735	1,354
Number of earners:[2]										
None	42	40.0	8,010	1,785	698	2,508	443	307	276	1,993
One	250	46.9	9,157	1,892	556	2,226	767	308	904	2,504
Two	284	30.7	6,036	1,250	406	1,537	409	158	507	1,769
Number of children:										
None	401	29.5	6,078	1,174	366	1,801	362	274	155	1,947
One	134	33.2	6,423	1,201	426	1,509	442	182	758	1,904
Two	120	41.4	7,748	1,644	469	1,974	658	140	1,194	1,669
Three or more	138	43.7	8,354	1,682	497	1,874	693	176	1,113	2,319
Age of youngest child:										
No children	400	29.5	6,079	1,178	363	1,806	363	270	155	1,945
1-4 years	161	43.5	7,969	1,463	474	1,830	540	134	1,598	1,931
5-12 years	170	36.8	7,209	1,544	452	1,593	616	253	720	2,032
13-17 years	62	35.2	6,981	1,424	482	2,039	639	560	375	1,966
Age:										
18-24 years	110	24.7	4,897	840	299	1,155	220	246	526	1,611
25-29 years	116	37.1	7,043	1,304	366	1,652	515	171	1,097	1,938
30-39 years	181	36.5	7,030	1,440	422	1,614	533	183	886	1,951
40-49 years	112	34.4	6,845	1,365	439	1,872	527	165	434	2,042
50-59 years	110	35.1	7,121	1,364	420	1,966	631	295	341	2,103
60-64 years	49	33.6	6,825	1,490	425	1,928	454	232	230	2,066
65 years and over	114	35.4	7,280	1,494	492	2,433	372	294	89	2,105
Own earnings:[3]										
None, negative, N/A[4]	36	18.7	3,697	841	250	1,061	334	47	181	984
$1 - 4,999	33	21.0	4,255	832	299	962	181	68	246	1,667
$5,000 - 9,999	66	21.1	4,244	824	271	953	301	137	298	1,462
$10,000 and over	46	19.2	3,912	766	212	1,037	222	165	191	1,318

[1]Household work is valued by specialist cost.
[2]Data are for only those women who are married, spouse present; therefore, the data are not related to the totals for all women.
[3]Data are for only those women who are employed full time; therefore, the data are not related to the totals for all women.
[4]Not available.

substitution of market purchases does not fully offset the lower amounts of household work.

Number of earners. With the rise in employment of women, the numbers of two-earner families have increased. The employment of a wife raises family money income but lowers the value of the wife's household work. The value of that work for a woman in a two-earner family was $6,036 in 1976, as compared with $9,157 for a woman in a one-earner family (see table 4). On average, then, the value of a woman's household work was estimated to be $3,121 less when she was in a two-earner family rather than in a one-earner family.

Consequently, comparisons of the relative well-being of one- and two-earner families are misleading when they focus on money income alone. The one-earner family is clearly better off economically than the two-earner family with identical money income. Not only is the value of household work lower in two-earner families, but their leisure time also is lower. Moreover, about one-third of the wife's paycheck goes into work-related expenses such as taxes, commuting costs, and child care (13).

Presence of children. The presence of children is one of the more important determinants of time use (9, 14). It leads directly to the devotion of sizable blocks of time to child care and indirectly to increased amounts of other household work. Both the number of children and the age of the youngest child influence the hours and value of a woman's household work.

Hours a week in child care in 1976 rose from 1.2 when there were no children to 5.9 when there was one child, to 9.1 when there were two children, and to 8.5 when there were three or more children. Consequently, the more children there were, the fewer hours of care there were per child (3). The value of these hours averaged $758 a year for a woman with one child, $1,194 for a woman with two children, and $1,113 for a woman with three or more children (see table 4).

When the youngest child was 1 to 4 years of age, hours in child care averaged 12.4 a week; they declined to 5.4 when the youngest child was 5-12 years, and to 2.9 when the youngest child was 13-17 years. The value of time spent in child care averaged $1,598, $720, and $375 a year, respectively (see table 4). These raw data may be misleading because of correlations between numbers of children and age of youngest child, but apparently hours of care per child did decline as the child became older.

The presence of children also meant added hours spent in meal preparation and cleanup and in doing laundry. The combined increases in child care and in other types of household work resulted in a steadily rising value of a woman's household work with the number of children: from $6,078 a year when there were no children, to $6,423 when there was one child, to $7,748 when there were two children, and to $8,354 when there were three or more children. Hours in meal preparation and cleanup and in doing laundry rose to some degree as the youngest child aged, partially offsetting the decline in hours of child care. Nonetheless, the value of a woman's household work fell, as the age of the youngest child rose, from $7,969 when the child was 1-4 years of age, to $7,209 when the child was 5-12 years, and to $6,981 when the child was 13-17 years.

Age. The raising of children affects the changing profile of a woman's household work over the life cycle. In 1976, the value of time spent in child care reached a peak of $1,097 a year when a woman was 25-29 years of age and then declined continually as a women aged (see table 4). No other type of household work varied as much in percentage terms over the life cycle.

All types of household work (except home repairs and hobbies) increased in the early years of adulthood, as shown by changes in household work of women from ages 18-24 to ages 25-29. Beyond age 29, changes in household work were modest, with two major exceptions: (1) Child care, which declined sharply as noted above, and (2) cleaning and gardening, which rose sharply after age 64. This rise in the value of cleaning and gardening work over the life cycle--and indeed the slight rise in work associated with meals--is surprising, since one would

expect the values of such work to decline as children age and eventually leave the home. Whether this means women become less efficient, or do more household work because they have more time, or spend more time in gardening because, for some, it is a leisure activity, is uncertain. In addition, these cross-sectional data may give a misleading picture of life cycle changes; perhaps women in the younger generations simply spend less time cleaning and cooking at every age than do women in the older generations.

When the types of household work were aggregated, their total value showed a sharp rise from $4,897 a year at ages 18-24 to $7,043 at ages 25-29. Thereafter, changes were fairly small. Even after the "retirement age" of 65, the value of a woman's household work did not diminish. Consequently, the life cycle profile of the value of household work was distinctly different from the life cycle profile of money earnings, with its characteristic inverted U shape resulting from reduced earnings in the later years of life.

Own earnings. Increases in a woman's own earnings might be expected to lower the hours of her household work. For a woman who was employed full time, there was a slight decline in hours of household work when her annual earnings were over $10,000. These hours were 21.0 a week when her earnings were $1 to $4,999, 21.1 when her earnings were $5,000 to $9,999, and 19.2 when her earnings were $10,000 or more (see table 4). The annual values of her household work were $4,255, $4,244, and $3,912, respectively.

The way in which the value of household work varies with the level of a woman's own earnings depends on the technique that is used to value the household work. Opportunity-cost techniques, which use wages foregone by the woman doing the work, result in rising, rather than falling, values of household work with rising earnings: from $1,567 when earnings are $1 to $4,999, to $4,795 when earnings are $10,000 or more. This rise in value occurs even though hours spent in household work decline with earnings. Only if the efficiency of women in household work rises with their earnings, which are in turn presumably related to education, would opportunity-cost techniques result in reasonable relative values of the real product of household work across earnings classes. Moreover, opportunity-cost techniques provide questionable relative values for earners as compared with nonearners; with those techniques, the hourly value of household work of nonearners is likely to be lower, even though their experience in such work is greater.

CHANGES IN THE VALUE OF HOUSEHOLD WORK SINCE 1976

Since 1976 the value of household work has risen sharply along with wage rates. In 1981, rough averages were $10,000 for women and $5,000 for men, increases of 47 percent since 1976. For the average full-time homemaker, a rough value is $12,500. In the aggregate, the value of household work has increased by about 60 percent to $1,200 billion for all adults, $825 billion for women, and $375 billion for men; those increases reflect growth of population as well as of wage rates.

Those rough estimates of increases assume that the hours spent in household work have not changed since 1976. Actually, however, household work hours of women have probably declined. For all women, regardless of employment status, the evidence points to some significant, but rather small, declines in hours of work from the midsixties to the midseventies (2, 8). Such declines may have continued in recent years. In addition, paid employment of women continued to increase, bringing with it the declines in household work hours that were documented earlier.

It is important to understand and to quantify the declines in household work hours that result from paid employment of women. Those declines are sizable; they affect the family dramatically, and they probably will continue into the foreseeable future. For example, the labor force participation rate for women was 51 percent in 1979 and is projected to reach at least 60

percent by 1990 (7). The relation between household work hours and paid employment could be clarified by additional data collection and research. Data for time use should be collected from large, representative samples of the population--possibly with longitudinal components, in which families would be followed over time. Then, multivariate analyses of household work hours could isolate the influence of employment on household work.

CONCLUSION

The estimated dollar values presented here substantiate the importance of household work. Its value is around 44 percent of GNP and for women, who account for most household work, its value is roughly double their reported money earnings. In addition to their supplementation of GNP, estimates of the value of household work could have a number of important uses. They are critical tools in litigation concerning deaths, injuries, and divorces because they establish the economic contribution of homemakers to their families. Dollar values of household work also could justify reforms in policies that effect the treatment of women in the social security system and affect the treatment of two-earner families in the income tax system.

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Of Time, Dual Careers, and Household Productivity[1]

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The time-diary method of measuring time allocation represents a significant advance in accounting for what may be America's most precious natural resource. It provides a complete accounting of time, one resource that is equally distributed to all segments of our society--at least in the short run. How productively or how wisely that resource is used is another matter.

Time allocations by themselves are limited in what they reveal about human behavior, such as its productivity or wisdom. To obtain information about human behavior, the analyst must either assign values (monetary, utilitarian, or moral) to time, or else ask people to evaluate the value of what they do or the "output" from how they spend time. The Bureau of Economic Analysis, U.S. Department of Commerce, assigned monetary values to time;[2] in this paper the evaluative responses of people are considered.

The sample consists of a cross section of almost 2,500 American adults and their spouses, who were interviewed and completed 24-hour time diaries in the fall of 1975 for the Survey Research Center of the University of Michigan. The Michigan study recontacted the respondents by telephone on three subsequent occasions in 1976 asking them to complete another daily time diary on each occasion. An extensive set of background and "subjective" questions about the values respondents attached to various uses of time were also included in this four-wave study. The final data tape for the project consisted of almost 8,000 variables, making it one of the most complex and richest social science data sets in the United States. Survey Research Center's national sample of 1,244 nonrural respondents who completed single-day time diaries in the fall of 1965 is also discussed.

The readers of this paper will likely encounter some unexpected, counterintuitive, and even unexplainable findings that challenge conventional wisdom about how societal life is organized and is changing. Popular models of America as a "postindustrial" society--either in the midst of a flowering of culture, cuisine, and recreating, or evolving into a "harried leisure class"--receive very little support in the time-diary data (5).

Time Spent on Housework

In both the 1965 and 1975 studies of time use, women reported close to 80 percent of all the household work or family care in America[3]--a figure that is not atypical for other Western or Eastern European countries in which time-diary studies have been conducted. While this proportion was lower in 1975 than a decade earlier, that was mainly a result of women doing less housework and not of men doing more housework. More women in the paid labor force, fewer married women, and fewer women with children accounted for the decrease in the amount of household work or family care by women from 1965 to 1975. Anaysis, however, revealed that this change also was part of a historical shift (6). For the first time in this century (other things being equal), women apparently were simply devoting less time to housework and family care than had previous generations of women. In 1965 and 1975, employed women were found to devote about half as much time as full-time homemakers in family care.

The time-diary data in both 1965 and 1975 also have provided vivid testimony to how insensitive men's family care time was to the

[1]This article is condensed from a paper presented at the Agricultural Outlook Conference in November 1981 at Washington, D.C. Complete copies are available from the Family Economics Research Group (see p. 2 for address).

[2]See "Measuring Household Production for the GNP" by Janice Peskin on p. 16.

[3]Family care includes all household cleaning, meal preparation, laundry, child care, and shopping. For further data on the methodology of time diaries, see Szalai, et al., (7) and Robinson (4).

pressures that escalate women's family care time. A woman's family care time increases dramatically when she marries or has children and declines dramatically when she enters the paid labor force; men's housework is barely affected by any of these factors. When men retire, however, their housework increases but it is likely to take place outside the home--in the yard, garden, or stores--rather than inside the dwelling unit where the "hard core" housework is performed. Men spend much less time with children than women do and are more likely to spend their time in "interactional" activities (e.g., play or reading) rather than in custodial activities (e.g., feeding or dressing).

How, then, do women react to the imbalances in this division of household labor? Do they find their lives less satisfying, or their free time less fulfilling? Do they look for more help from their husbands in household work or child care? The answers to these questions when asked of these same women, in large part, seems to be "no"--at least in terms of the subjective questions asked in the survey. Even women in the most time-demanding conditions--employed full time and with young children at home--did not describe their lives or their free time as less satisfying than did women who have neither of these responsibilities. Nor did most married women say they expect or wish for more help from their husbands (4). While the proportion of women expressing such opinions in 1975 did increase from the 19 percent stating that wish in 1965, it still amounted to less than a third of all wives.[4]

Single women (without children) still do two to three times as much housework as their male counterparts; not that the current state-of-affairs means that women have less free time generally than men. On the whole, adult men and women have roughly equivalent amounts of free time across the life cycle. This is because of the imbalance between full-time homemakers (who have more free time than men) and women in the labor force (who have less). What the time diaries do make abundantly clear is that it is the married working mothers who comprise the "harried leisure class" in our society. Far higher proportions of married working mothers responded "always feel rushed to do the things you have to do" than any other social segment of the population in the survey.

The Output From Family Care

Are there benefits from housework time that employed women sacrifice when they invest their time in the workplace as well as the household? What is it that makes them as satisfied with their lot in life as women who do not work? Is there any return for their sacrifice of free time, or for their more harried lifestyle? In particular, what differences in "output" from their lower time spent at housework can be identified?

The measures of output focused on the "quality" of the final product. Quality refers to how clean and neat the house is, how clean or adequate the supply of laundry is, how good or adequate the supply of food in the house is, and how well the children are brought up. Ideally, quality of output should be measured by standardized ratings of such factors made by experts in the fields of household sanitation, high cuisine, or developmental psychology. That option, however, was clearly not feasible with a national sample scattered across the country and already burdened with providing over 4 hours of information. Therefore, subjective reactions of the respondents themselves were used. It may be argued that as final consumers of the products involved they are the best judges of their value.

Respondents were asked to rate these various outputs using a scale of 0 to 10; 10 representing complete satisfaction and 0 reported for complete dissatisfaction.

Very few householders rated themselves a 10, or even a 9, on the scale. The average rating for household cleanliness was 7.26 and was slightly higher by men than by

[4]This result was not apparently an artifact of either the phrasing of the questions or the presence of the husband during the interview. Followup, open-end questions showed that women deeply feel housework is not in their husband's "territory." Moreover, more women expressed a desire for more help from the husband when he was present than when he was absent during the interview.

women. Scores are compared in the table on page 29 between full-time homemakers and employed women, who spend only half as much time in family care as their homemaker counterparts. Differences in average satisfaction ratings of women in and out of the paid labor force before and after correction for other important predictors of household output are shown in the table. The "after" corrections were determined by the multivariate regression program, Multiple Classification of Analysis of Andrews, et al. (1). When the measures are controlled for age, income, marital status, and other characteristics, full-time homemakers are not significantly more satisfied with the household output, with one exception--quality of main meal. No significant differences existed between employed women (who spend minimal time with these activities due to outside job pressures) and women who devote at least half again as much time in their roles as full-time homemakers. In other words, when one takes into account the differential composition of women in and out of the paid labor force in age, income, and so forth, women's employment per se does not emerge as a significant predictor of how satisfied they are with household output.

It might well be argued, however, that the questions tapped only the standards of the respondents and that women who have entered the paid labor force have simply lowered their standards of achievement; that would account for their lack of difference from full-time housewives. As a check, the respondents were asked to rate their household outputs as a "person who is very picky about things" would rate them on the 0 to 10 scale for three of the criteria--cleanliness of the household, cleanliness of the laundry, and quality of the main meal.[5]

In general, the introduction of the "picky person" did serve the intended purpose of deflating the values on the 0 to 10 scale. The pattern of those scores was similar to those in the table: Housewives rated their various productivity characteristics higher than employed women did, but not significantly beyond chance after correction for various characteristics. The one exception appears to be in the quality of meals, but the difference is not highly significant.[6]

Summary and Conclusions

Despite the large differences in the time spent in housework and other family care activities by full-time homemakers and women in the paid labor force, little evidence indicated that household production suffered significantly as a consequence of employment. Employed women rated the cleanliness of their households almost as favorably as did full-time homemakers. Little difference was also found in ratings between employed women and housewives in their evaluations of the amount of food, amount and cleanliness of laundry, and the accomplishments of their children. Housewives rated the quality of their main meals significantly higher than did employed women, but the significance was marginal.

These results do not stand in complete isolation; for example, there does not seem to be any convergent evidence that children raised by mothers who work are any worse off psychologically or emotionally as a result (3). This raises basic questions about the assumption that household productivity can be properly accounted for strictly in terms of hours spent. If an employed woman can accomplish much the same levels of productivity--and without feeling more dissatisfied in the process--then it

[5]The interviewers of the Survey Research Center, at the time of their first and only visit to the respondents' premises, made what might be considered an objective set of ratings. Immediately after the interview they rated on a scale from 1 (very clean) to 5 (dirty) the cleanliness of the household. Those ratings averaged 1.91 which corresponds roughly to the ratios the respondents gave their own houses (on the 0 to 10 scale).

[6]The differences are reduced into insignificance when other factors, such as the enjoyment the woman derives from the cooking or the energy and effort she devoted to it, were added into the analysis.

Satisfaction with household output by employed women and housewives[1]

[0 = completely dissatisfied]
[10 = completely satisfied]

Characteristic	Single (uncorrected) difference	Difference--corrected for background factors	Number of respondents
House			
How clean is your house?			
Employed women	7.01	7.13	349
Housewives	7.38	7.30	324
Difference	.37	[2].17	
Food			
a. How good are the main meals?			
Employed women	7.65	7.76	349
Housewives	8.14	8.06	322
Difference	.49	.30	
b. Amount of food in the house?			
Employed women	8.04	8.24	350
Housewives	8.47	8.33	322
Difference	.43	[2].09	
Clothing			
a. How clean is the laundry?			
Employed women	8.71	8.78	350
Housewives	9.02	8.93	322
Difference	.31	[2].15	
b. The amount of clean clothes available?			
Employed women	8.74	8.85	350
Housewives	9.14	9.04	322
Difference	.40	[2].19	
Children			
a. The amount of time you spend with your children?			
Employed women	6.88	6.95	169
Housewives	7.32	7.18	175
Difference	.44	[2].23	
b. How well your children are doing in life?			
Employed women	8.28	8.36	169
Housewives	8.43	8.35	175
Difference	.15	[2]-.01	

[1]1975 data only.
[2]Not significant.

becomes difficult to argue that all hours of housework should valued equally.

All this hinges on the present tentative nature of the measures of output or productivity. These measures need far more verification of their validity and reliability. The correlation between respondent and interviewer ratings of cleanliness are currently being analyzed, as well as the ratings of husbands, who also are affected by the quality of household output. More direct quantitative measurements of output are also being examined; while it is true that housewives do cook more meals and wash more loads of laundry than employed women, the amounts involved still fall short of the overall 2 to 1 ratio of time expenditure differences between the two groups.

These results are intended to raise questions rather than to answer them. Nonetheless, they reinforce the need for more definitive and comprehensive study of what happens in the household as a result of what women invest and sacrifice in their time and energy. Now, when so many women are vitally concerned with the costs and benefits of dual careers, it is clearly the time for careful and considered answers.

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New Methods for Studying Household Production

By Colien Hefferan
Economist

Research in household production has many uses for home economists and others working with families. Comprehensive and up-to-date information regarding household productive activities is used to determine what families produce for themselves and how this production serves to substitute for or augment goods and services purchased in the marketplace. Information about the activities that contribute most to helping families maintain and improve their levels of living is used to design educational programs and develop criteria on which individuals and families can base decisions for the most effective direction of their productive efforts. Research-based estimates of the extent and value of household production contribute to public policy discussions of broad social issues, such as the inclusion of unpaid household work in the social security system and national income accounts. Estimates of the economic value of household production can also be used in resolving legal disputes over the distribution of property during divorce, the assessment of loss in wrongful death cases, and the taxation of gifts and estates.

Three methodological problems, however, have impeded progress in research and limited the applicability of research findings in household production. Problem 1 concerns the definition of household production, specifically identification of the boundary between production and consumption activities in the home. Problem 2 concerns measurement of household production, specifically measurement of multiple activities that occur simultaneously and of work performed by two or more persons together. Problem 3 concerns valuation, specifically determination of the techniques that will produce the most meaningful and consistent estimates of the economic value of household work.

During 1981, the Family Economics Research Group of the Agricultural Research Service, U.S. Department of Agriculture, contracted with three research teams that

were to examine these methodological problems. Ivan Beutler and Alma Owen, at the University of Missouri, examined the definition issue. H. Leslie Steeves, at the University of Iowa, and Karen Goebel, Margaret Andreasen, Lloyd Bostian, and Richard Powers, at the University of Wisconsin, examined simultaneous production in households with employed women. Kathryn Stafford and Margaret Sanik, at Ohio State University, tested alternative methods of valuing household food production.

Definition of Household Production

Based on their theoretical model of nonmarket production,[1] Beutler and Owen developed a four-part questionnaire that differentiates the home activity process into three components: Household production, nonreplaceable home production, and consumption.[2] The questionnaire is designed to distinguish production and consumption on the bases of the nature of the inputs into an activity, the technology employed (including human capital), and the characteristic output from the activity. The questionnaire can also be used as a general measure of the level of selected nonmarket activities (with emphasis on meal preparation) in which the household engages, and socioeconomic variables that describe the household. Finally, the questionnaire can be used to assess the respondent's perception of the extent to which the characteristics produced through nonmarket activities indicate the process of production or consumption.

The questionnaire was reviewed by a select panel of experts in the area of household production research and pretested on small, deliberate sample.

Measurement of Simultaneous Activities

Steeves and her colleagues used data collected from a sample of 378 employed women living in Wisconsin and Illinois to examine the nature and extent of simultaneous productive activities in the home. They classified household production activities into eight categories: Shopping, food preparation, housecleaning and maintenance, travel, management, physical care of family members, interactive care of family members, and transportation of family members. Of all household production activities, shopping was most likely to be done as a separate activity (54 percent of the time), while travel was least likely to be done as a separate activity (14 percent of the time). Other categories of productive activities were done as separate activities about one-fourth to one-third of the time. When done simultaneously, however, the activities most likely to accompany household production were interactive family care and other personal interactions. Respondents worked alone more than one-half their household productive time and worked only one-third their time with another family member. The remainder of the time they worked with someone other than family members.

Demographic characteristics were closely related to the total time spent in household production activities. The factors most likely to be related to total household work time were age of youngest child, marital status, age of the respondent, number of children at home, and hours worked outside the home.

Demographic characteristics were less closely related to degree of simultaneous productive activities than to total household work time. Specifically, married women were more likely to engage in family care, management, and travel simultaneously with

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[1] Ivan F. Beutler and Alma J. Owen, 1980, A home production activity model, Home Economics Research Journal 9(1):16-26.

[2] Household production consists of unpaid activities in the home that could be replaced by market goods and services. Nonreplaceable home production consists of unpaid activities in the home resulting in goods and services that have use value, but no market equivalent goods and services. Consumption consists of activities associated with the final use of goods and services offered through market and nonmarket sources.

other productive activities than were single women, who tended to engage in these activities as separate tasks. The more hours per week the homemaker worked for pay, the more likely she was to engage in family care as a simultaneous activity. Similarly, the greater the number of children, the more likely the homemaker was to engage in food preparation, housecleaning and maintenance, family care, and travel simultaneously with another productive activity. The findings of Steeves et al. suggest, not surprisingly, that the greater the demands on the employed woman's time, the more likely she is to "dovetail" household productive activities.

Valuation Techniques

Stafford and Sanik used data on household food production activities in two-parent, two-child families in Syracuse, N.Y., to demonstrate the feasibility of the product-accounting approach to estimating the value of household production. Product-accounting estimates are calculated by summing the prices of market goods and services comparable to goods and services produced at home. This method is most useful when the market offers close substitutes for components of home production, as is the case with food production.

Stafford and Sanik compared product-accounting estimates of the value of home food production to estimates derived from alternative income-accounting approaches, including the replacement-cost method, the substitute-labor-cost method, and the opportunity-cost method, (see box on p. 33). They concluded that the product-accounting methods generate value estimates that are useful for assessing the efficiency of resource use and the substitution of home-produced goods for market goods. Income-accounting methods, which tend to be based on restrictive assumptions, generate estimates of the economic contributions of home producers to their families and to the economy.

The Ohio researchers found that the average daily market cost of food prepared and served at home was lower in families with employed homemakers than in those with nonemployed homemakers, reflecting greater food consumption away from home in families with working women. Market-cost estimates were unrelated to age of the younger child, location of residence, husband's education, wife's education, sex of children, or family income.

Implications

The methodological problems associated with definition, measurement, and valuation in household production research are interrelated. The definition given household production influences the methodology used to measure the process and the valuation technique used to assess the products. The extent to which household production activities can be measured limits the possibilities for valuation.

The Beutler-Owen definitions of household activities suggest that much of what is produced in the home has no specific market analogue, yet this production is a valuable part of the household production process. In fact, they suggest that there are components of household activities (nonreplaceable home production) for which a large part of value is dependent on the fact that the production cannot be easily replaced by the market. Their model implies that much of what is produced in the home has value because of the interpersonal relationships between the producer and the consumer. Thus, a fully developed definition of household production has quantifiable and nonquantifiable components.

The work of Steeves et al. demonstrated that the job of homemaking is sufficiently demanding and complex, especially for employed women, that it may require that many tasks be done simultaneously. That apparently is especially true in households with young children, where interactive care of family members accompanies many other productive activities. Measurement of time spent in primary household activities tends to mask the intensity of household work done in many families. Applying the Beutler-

Two basic income-accounting approaches used to estimate the economic value of time used in household production are market-cost methods and opportunity-cost methods. Market-cost methods estimate the cost of acquiring household services through the paid labor force. Opportunity-cost methods estimate the income that is foregone by homemakers who engage in unpaid household work rather than paid employment.

Market-cost methods are based on the assumption that household work has a close counterpart in the market. Valuation is calculated either by the "replacement-cost" technique, in which the general wage rate for domestic and service workers is applied to the entire job of homemaking, or by the "specialist- or substitute-labor-cost" technique, in which the wage rates applicable to each component of the job of homemaking are used. Market-cost methods are the most common means of estimating the economic value of home production. The methods have been criticized because the efficiency of home producers and market workers may vary, thereby reducing the applicability of market wages to home production.

Opportunity-cost methods are based on the assumptions that household members divide their productive time in such a way as to receive the same value from their last hour of paid employment as they receive from their last hour of household work and that they have the opportunity to choose between paid employment and household work. The value of the time that employed persons spend in household production is calculated by use of the wage rate they earn in paid employment. The calculation for nonemployed persons is more complicated. The potential market wage for nonemployed persons is estimated from the average wage rates earned by persons with similar characteristics. This imputed wage is then used to calculate the value of time spent in household work by nonemployed persons. Under some opportunity-cost methods, actual and imputed wage rates are adjusted for taxes and the expenses incurred in working. These adjustments lower the estimated value of household production. Opportunity-cost methods have been criticized because they assign to the same work significantly different estimated values when performed by workers with different characteristics.

Owen model of home activities to the Steeves analysis of simultaneous activities in employed women's families indicates that much household production may occur simultaneous to nonreplaceable home production. Part of that production might be easily measured and quantified, but nonreplaceable home production, such as parent-child interaction, is not easily measured.

The product-accounting valuation technique tested by Stafford and Sanik offers a way to value the products of the productive process that is independent of the complex inputs to that process. This valuation method may be especially valuable when households are trying to determine how best to direct their productive efforts.

These three methodological studies suggest that research in household production can go beyond the analysis of time spent in various household activities. Household activities can be delineated into categories of measureable production, nonreplaceable productive activity, and consumption. Simultaneous activities can be measured and assessed. Household production activities, if replaceable in the market, can be valued on the basis of the outputs of the process rather than on the inputs. Possibly new methods for studying household production can generate research that would help families use their productive resources to best meet their goals.

Sources of Time-Use Data for Estimating the Value of Household Production

Two sources of time-use data are used to estimate the economic value of household production. Data collected by Cornell University researchers[1] in 1967-68 from 1,378 families living in Syracuse, New York, were used with 1979 wage rates to estimate economic value by the specialist-cost technique (see box in "New Methods for Studying Household Production," p. 33). Similarly, researchers at the Bureau of Economic Analysis used data collected by the Survey Research Center at the University of Michigan in 1975-76 from a national sample of 1,391 households to estimate value by the specialist-cost technique (see article by Peskin, p. 16). The methods of collecting data and estimating value were similar in both studies, but the final estimates differ somewhat. Estimates based on the Syracuse data are higher than those reported for the national sample.

There are several reasons for the differences in estimates. First, the studies covered different time periods. There is some evidence that time-use patterns have shifted over the decade and wage rates have increased rapidly. Second, the samples in each study were different. The 1967-68 data were collected in an urban area in the Northeast from a sample of husband-wife families. The 1975-76 sample was representative of all households in the United States. This difference in sample coverage potentially influenced the patterns and degree of household production observed, as well as the ability to aggregate the findings and apply them to all U.S. households. Finally, the types of work included as household production differed slightly between the two studies and resulted in different estimates of value.

[1]Gauger, William H., and Kathryn E. Walker, 1973, The dollar value of household work, Information Bulletin 60, New York State College of Human Ecology, Cornell University, Ithaca, N.Y.

Is the Modern Housewife a Lady of Leisure?[1]

"In most masculine eyes--and even in some feminine--the average housewife today is a Cinderella in modern dress. The magic wand of the Industrial Revolution is supposed to have transformed her from a household drudge into a lady of leisure. On every hand the opinion is heard that she has ceased to be a 'producer,' that insofar as she still has a job, it is that of director of consumption. According to this view, another wave or two of the wand will imperil her very existence. Her early demise as an occupational type would seem inevitable.

"In the long run this prediction as to the housewife's fate will probably prove correct. For her fairy godmother seems to have no intention of ceasing to lighten her burdens. Every year, every month, sees a further increase in the use of ready-cooked food, ready-made clothing, ready-washed laundry, even ready-trained children--and this despite our almost violent prejudice in favor of the home product.

"But we appear to have overestimated the speed at which the transformation has been taking place. We have been so absorbed in watching the changes in the home that our ideas as to what has already happened have gotten somewhat ahead of the event; we gaze into the future and think we are viewing the present. In the days of our great-grandchildren the housewife may be as extinct as the dodo. But at the present time some 26,000,000 hale and hearty followers of the trade might rise and announce in the words of Mark Twain, 'The reports of my death have been greatly exaggerated.'

"....In view of the transfer from the home of the spinning and weaving and sewing, the butchering, baking and candlestick-making of our great-grandmother's day, in view of the decrease in the size of the family and of the smaller and more convenient houses in which we now live, why is it that so many homemakers are still overworked?

[1]Excerpts taken from article, by Hildegarde Kneeland, senior home economist, Bureau of Home Economics, U.S. Department of Agriculture, in The Survey, 1929, 62(5):301-336.

"A partial answer is undoubtedly to be found in the regrettable fact that our great-grandmothers were even more overworked. Even more important, perhaps, is the fact that a larger share of the work of the home was formerly done by other members of the household. Not only were there more families employing hired help, but more had grandmothers, unmarried sisters, unmarried daughters living and working in the home. Much of the gain which the Industrial Revolution has so far brought has gone into reducing the work of the household to a one-worker job....

"....The opinion is often heard that while the housekeeping tasks have diminished, the work of managing the family income and caring for children according to modern standards has greatly increased. From the standpoint of the homemaker's responsibility, this is undoubtedly true. But as far as the demands upon her time are concerned, the evidence seems to be against it....It is the routine housework--the provision of meals, the care of the house, the laundering and mending--that still requires the bulk of the homemaker's time. She is still predominately a housekeeper, rather than a household manager.

"Yet another reason is sometimes advanced for the fact that the modern housewife is still so busy. According to these critics, she has wasted the freedom brought by the Industrial Revolution in inefficiency and elaboration of work. Even the farm homemaker with several young children would now have plenty of leisure, they claim, if she would organize her work as well as her great-grandmother did and adopt the oldtime simple standards of housekeeping.

"Now, there is no question that greater efficiency in housework and greater emphasis upon essentials would do much to lighten the homemaker's burdens. But if we remove the rosy spectacles through which we are apt to view the past, it is not at all certain that we would find there the model for which we are seeking. Concerning our great-grandmother's skill in managing her time we have, after all, very little knowledge. History does not reveal her substitute for a time schedule. Of her standards of housekeeping, however, we have some evidence. And when we recall the cakes and pies, the pickles and preserves that graced her table, her starched linens and ruffled petticoats, and the intricate construction of her gowns and bonnets, we may well wonder whether our progress has been wholly in the direction of greater elaboration!

"Whatever may have been true of our great-grandmother's day, this much is certain: the primary problem of a large proportion of homemakers is still how to cut down their hours of work to a reasonable number....

"Let her husband share the work with her,' the feminist suggests. But quite aside from the possibly undue optimism concerning the husband's acceptance of this plan, can we consider it as anything more than a temporary makeshift? Can we look forward with any satisfaction to a way of life in which husband and wife prepare a hasty breakfast before dashing off to work, and return home at the end of the day to prepare dinner, wash dishes, and do the cleaning and laundering? Many of us have seen it tried. Some of us have tried it. And it is not our idea of a satisfactory home life, even for the family without children.

"It is possible, of course, that the number of part-time jobs for women may increase. But usually even these jobs will require regular, consecutive hours of work --and three meals a day and the emergency needs of the family play havoc with such standard hours. Many of the homemakers with too much leisure, moreover, are 'post-graduate mothers,' who find it difficult to get any jobs at all, since their years of full-time homemaking will have put them out of the running in the business and professional world. One of the most difficult aspects of this whole problem of the housewife's time is the variation in the amount of her homemaking work at different periods in her married life....

"The conclusion seems inevitable, then, that the time spent by married women in housekeeping must be reduced--reduced not only for those who are overworked to a reasonably-sized job, but reduced as well for many others to a leisure-job--a job which can be done by the homemaker outside of

regular working hours, a job in many cases so small as not to be properly classed as a job at all.

"What are the methods by which these reductions can be made?...

"The employment of 'hired help,' of course is the easiest method from the standpoint of the individual homemaker. But it is a method which few families can afford. Only about 5 per cent of the homes of the country now employ paid workers, and there is little reason to expect that this number will greatly increase in the future. And fortunately so. There is no surer way of postponing a real solution of the homemaker's time problem than by foisting it on the shoulders of the unskilled worker....

"For most homemakers, however, the cost of even an unskilled employee is prohibitive. And many who could afford to pay for help find the disadvantages outweighing the advantages. What promise can they hope to find in the second method of reducing the demands of their housekeeping--in the new techniques and devices for increasing household efficiency?...

"But even in this most promising field, the possibilities are after all limited. Finding 'the one best way' for even a simple domestic job is a difficult and time-consuming matter, requiring much skill and still more patience....And using 'the one best way' consistently and with reasonable speed, once it is found, requires more frequent repetition of the task and more uniform conditions of work than even the thrice-daily routine of dishwashing provides. The most the housewife can hope to achieve is a rough standardization, the elimination of the most glaring wastes in her use of time and effort. And even these limited gains will probably be made by a very small proportion of homemakers....

"Much more promise, probably, lies in the labor-saving house and in household equipment. For here the initiative rests largely with the builder, manufacturer, and high pressure salesman--and they are determined to rescue the homemaker from her drudgery. For the farm woman especially, and for all homemakers who are overworked, this seems the most hopeful solution. But the cost of a large assortment of household appliances, most of which must stand idle most of the time, will greatly restrict their use. And in even the most fully equipped house, housekeeping cannot be reduced to a leisure-time job, if the homemaker prepares the meals herself and does her own cleaning and laundering....

"It is this method, of course, which has brought the major reduction in housekeeping in the last fifty years. And in spite of our antagonism, it is probably the method which will bring the greatest reduction in the coming half century. The equipment salesmen may win out in the next ten or twenty years, but by the time the machinery which they are about to sell us becomes obsolete, the commercial laundry, the commercial housecleaning service, and finally that still most unsatisfactory agency, the commercial meal-provider, will probably have won us over as their customers, just as the clothing manufacturer, the canner, and the baker already have done. We do not like the idea now. A few years ago we did not like the idea of ready-made clothing. Our capacity to change our likes, to adjust to changed economic and social conditions, is probably not at an end."

CRIS Reports—NE-113

USE OF TIME IN RURAL AND URBAN FAMILIES[1]

Project Number: NE-113 (Regional)

Contact Person:

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Cooperating States:[2]

California, Connecticut, Louisiana, New York, North Carolina, Ohio, Oregon, Utah, Virginia, Wisconsin, Oklahoma, and Texas.

[1]NE-113, "Interstate Urban/Rural Comparison of Families' Time Use," was revised and retitled.

[2]North Carolina will not participate in the revised project; Ohio did not take part in data collection.

Starting Date: January 1, 1982

Termination Date: September 30, 1984

Objectives:

Compare similarities and differences in use of time in work (household, paid, and volunteer) among rural and urban populations in various geographic areas in the United States.

Analyze patterns of time use, with attention to rural-urban differences, using the data base collected under the original NE-113 project.

Findings:

A summary of results from the NE-113 project through 1980 is available in the summer 1981 issue of Family Economics Review (see "Time Use and Family Life," by Karen P. Goebel, p. 20-25).

Additional work not included in this article is reported from New York and North Carolina. Both States are studying the relationship between wage rates of the spouses, and how wage rates affect the time spent in household work by husbands and wives.

Selected Publications:[3]

1. Cogle, F. L., and G. E. Tasker. 1981. Children: An untapped resource for building family strengths. In N. Stinnett, J. DeFrain, P. Knaub, K. King, and G. Rowe, editors. Family Strengths 3: Roots of Well Being. University of Nebraska Press, Lincoln.
2. _____, D. W. Beakley, and B. B. McFatter. 1981. Home responsibilities: Are they still "her" job? Journal of Extension, vol. 19, p. 13-17.
3. Goebel, K. P., and C. B. Hennon. [In press.] An empirical investigation among wife's employment status, stage in the family life cycle, meal preparation time, and expenditures for meals away from home. Journal of Consumer Studies and Home Economics.
4. McCullough, J. L. 1981. Time Use in Utah Families. Research Report No. 57. Utah Agricultural Experiment Station, Logan.
5. Nickols, S. Y., and K. D. Fox. 1980. Time use in Oklahoma families. Oklahoma Families. Family Study Center, Oklahoma State University, Stillwater.
6. O'Neill, B. M. 1979. Children sharing household work. Human Ecology Forum 10(1):18-21.
7. Ortiz, B., M. McDonald, N. Ackerman, and K. P. Goebel. 1981. The effects of homemaker's employment on meal preparation time, meals at home, and meals away from home. Home Economics Research Journal 9(3):200-206.
8. Sanik, M. M. 1981. Division of household work: A decade comparison 1967-1977. Home Economics Research Journal 10(2):175-180.

[3]Taken from NE-113, "Interstate Urban/Rural Comparison of Families."

Households and Families, March 1981

Of the estimated 82.4 million households in the United States in March 1981, 73 percent were family households (maintained by two or more persons who are related and living together). Since 1970, the total number of households has increased by 30 percent: family households by 17 percent, and nonfamily households (maintained by persons living alone or with other unrelated persons) by 85 percent.

Married-couple families with own children under 18 decreased by 2.4 percent between 1970 and 1981; in contrast, single-parent families with own children under 18 increased over 95 percent.

One-person households increased from 17 percent of all households in 1970 to 23 percent in 1981. Persons per household averaged 2.73 in 1981, compared with 3.14 in 1970.

Source: U.S. Department of Commerce, Bureau of the Census, 1981, Households and families, by type: March 1981 (advance report), Current Population Reports, Population Characteristics, Series P-20, No. 367.

Cost of food at home estimated for food plans at 4 cost levels, March 1982, U.S. average[1]

Sex-age groups	Cost for 1 week				Cost for 1 month			
	Thrifty plan[2]	Low-cost plan	Moderate-cost plan	Liberal plan	Thrifty plan[2]	Low-cost plan	Moderate-cost plan	Liberal plan
FAMILIES								
Family of 2:[3]								
20-54 years	$33.90	$43.70	$54.60	$65.30	$146.70	$189.20	$236.70	$283.00
55 years and over	30.50	39.00	48.30	57.50	132.30	169.30	209.40	249.40
Family of 4:								
Couple, 20-54 years and children--								
1-2 and 3-5 years	48.10	61.40	76.40	91.30	208.40	265.90	331.00	395.40
6-8 and 9-11 years	58.00	74.20	92.80	111.00	251.20	321.40	402.20	480.70
INDIVIDUALS[4]								
Child:								
7 months to 1 year	7.00	8.40	10.20	12.10	30.20	36.40	44.30	52.30
1-2 years	7.80	9.90	12.20	14.40	33.90	42.80	52.70	62.50
3-5 years	9.50	11.80	14.60	17.50	41.10	51.10	63.10	75.60
6-8 years	12.10	15.30	19.20	22.90	52.20	66.40	83.00	99.20
9-11 years	15.10	19.20	24.00	28.70	65.60	83.00	104.00	124.20
Male:								
12-14 years	16.10	20.30	25.40	30.30	69.80	87.90	109.90	131.10
15-19 years	17.60	22.40	28.00	33.60	76.30	96.90	121.30	145.40
20-54 years	17.00	21.90	27.60	33.10	73.50	95.00	119.70	143.60
55 years and over	15.10	19.40	24.10	28.80	65.60	84.10	104.40	124.90
Female:								
12-19 years	14.30	18.20	22.50	26.70	62.00	78.70	97.30	115.80
20-54 years	13.80	17.80	22.00	26.30	59.90	77.00	95.50	113.70
55 years and over	12.60	16.10	19.80	23.50	54.70	69.80	86.00	101.80
Pregnant	17.30	22.00	27.00	32.00	75.00	95.10	117.00	138.80
Nursing	18.40	23.30	28.90	34.30	79.60	100.80	125.30	148.70

[1]Assumes that food for all meals and snacks is purchased at the store and prepared at home. Estimates for each plan were computed from quantities of foods published in the Winter 1976 (thrifty plan) and Winter 1975 (low-cost, moderate-cost, liberal plans) issues of Family Economics Review. The costs of the food plans were first estimated using prices paid in 1965-66 by households from USDA's Household Food Cosumption Survey with food costs at 4 selected levels. USDA updates these survey prices to estimate the current costs for the food plans using information from the Bureau of Labor Statistics: "Estimated Retail Food Prices by Cities" from 1965-66 to 1977 and "CPI Detailed Report," tables 3 and 9, after 1977.

[2]Coupon allotment in the Food Stamp Program based on this food plan.

[3]10 percent added for family size adjustment. See footnote 4.

[4]The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person--add 20 percent; 2-person--add 10 percent; 3-person--add 5 percent; 5- or 6-person--subtract 5 percent; 7- or more-person--subtract 10 percent.

Cost of food at home for food plans at 3 cost levels, March 1982, Northeast region[1]

Sex-age groups	Cost for 1 week			Cost for 1 month		
	Low-cost plan	Moderate-cost plan	Liberal plan	Low-cost plan	Moderate-cost plan	Liberal plan
FAMILIES						
Family of 2:[2]						
20-54 years	$46.20	$59.30	$71.50	$200.10	$256.70	$310.00
55 years and over	41.10	52.00	62.70	177.90	225.70	271.80
Family of 4:						
Couple, 20-54 years and children--						
1-2 and 3-5 years	64.80	82.60	99.70	280.60	357.70	431.80
6-8 and 9-11 years	78.40	100.30	121.10	339.30	434.60	524.60
INDIVIDUALS[3]						
Child:						
7 months to 1 year	8.60	10.80	12.80	37.30	46.80	55.60
1-2 years	10.40	13.00	15.70	44.90	56.40	67.80
3-5 years	12.40	15.70	19.00	53.80	67.90	82.20
6-8 years	16.20	20.60	24.90	70.00	89.30	107.80
9-11 years	20.20	25.80	31.20	87.40	111.90	135.00
Male:						
12-14 years	21.50	27.40	33.00	93.10	118.90	143.20
15-19 years	23.70	30.30	36.60	102.50	131.30	158.70
20-54 years	23.20	30.00	36.30	100.60	129.80	157.40
55 years and over	20.50	26.00	31.50	88.60	112.80	136.50
Female:						
12-19 years	19.10	24.20	29.10	82.70	105.00	126.10
20-54 years	18.80	23.90	28.70	81.30	103.60	124.40
55 years and over	16.90	21.30	25.50	73.10	92.40	110.60
Pregnant	23.10	29.10	34.90	100.20	126.20	151.30
Nursing	24.50	31.30	37.50	106.40	135.40	162.30

[1]Assumes that food for all meals and snacks is purchased at the store and prepared at home. Estimates for each plan were computed from quantities of foods published in the Winter 1975 issue of Family Economics Review. The costs of the food plans were first estimated using prices paid in 1965-66 by households in the Northeast region from the USDA's Household Food Consumption Survey with food costs at 3 selected levels. These prices are updated by use of "Estimated Retail Food Prices by Cities" (Boston; New York, northeastern New Jersey; Philadelphia) release monthly by the Bureau of Labor Statistics.

[2]10 percent added for family size adjustment. See footnote 3.

[3]The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person--add 20 percent; 2-person--add 10 percent; 3-person--add 5 percent; 5- or 6-person--subtract 5 percent; 7-or-more-person--subtract 10 percent.

Cost of food at home for food plans at 3 cost levels, March 1982, North Central region[1]

Sex-age groups	Cost for 1 week			Cost for 1 month		
	Low-cost plan	Moderate-cost plan	Liberal plan	Low-cost plan	Moderate-cost plan	Liberal plan
FAMILIES						
Family of 2:[2]						
20-54 years	$44.70	54.80	66.40	193.30	237.70	287.60
55 years and over	39.90	48.60	58.60	173.10	210.70	253.90
Family of 4:						
Couple, 20-54 years and children--						
1-2 and 3-5 years	63.00	77.00	93.00	272.70	334.00	402.90
6-8 and 9-11 years	76.30	93.70	113.30	330.20	406.10	490.40
INDIVIDUALS[3]						
Child:						
7 months to 1 year	8.60	10.30	12.20	37.30	44.80	52.90
1-2 years	10.20	12.40	14.70	44.20	53.60	63.80
3-5 years	12.20	14.80	17.90	52.80	64.30	77.60
6-8 years	15.90	19.50	23.50	68.70	84.30	101.60
9-11 years	19.80	24.40	29.40	85.80	105.70	127.30
Male:						
12-14 years	21.00	25.70	31.00	90.80	111.50	134.30
15-19 years	23.00	28.30	34.30	99.70	122.70	148.40
20-54 years	22.40	27.70	33.70	97.00	120.20	145.90
55 years and over	19.80	24.20	29.40	86.00	105.00	127.20
Female:						
12-19 years	18.70	22.70	27.30	80.90	98.50	118.20
20-54 years	18.20	22.10	26.70	78.70	95.90	115.60
55 years and over	16.50	20.00	23.90	71.40	86.50	103.60
Pregnant	22.40	27.10	32.50	97.20	117.60	141.00
Nursing	23.80	29.10	34.90	103.00	125.90	151.20

[1]Assumes that food for all meals and snacks is purchased at the store and prepared at home. Estimates for each plan were computed from quantities of foods published in the Winter 1975 issue of Family Economics Review. The costs of the food plans were first estimated using prices paid in 1965-66 by households in the North Central region from the USDA's Household Food Consumption Survey with food costs at 3 selected levels. These prices are updated by use of "Estimated Retail Food Prices by Cities" (Chicago, Cleveland, Detroit, St. Louis) released monthly by the Bureau of Labor Statistics.

[2]10 percent added for family size adjustment. See footnote 3.

[3]The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person--add 20 percent; 2-person--add 10 percent; 3-person--add 5 percent; 5- or 6-person--subtract 5 percent; 7-or-more-person--subtract 10 percent.

Cost of food at home for food plans at 3 cost levels, March 1982, Southern region[1]

Sex-age groups	Cost for 1 week			Cost for 1 month		
	Low-cost plan	Moderate-cost plan	Liberal plan	Low-cost plan	Moderate-cost plan	Liberal plan
FAMILIES						
Family of 2:[2]						
20-54 years	$43.10	$53.80	$64.20	$186.70	$232.90	$278.20
55 years and over	38.40	47.20	56.10	166.10	204.50	243.10
Family of 4:						
Couple, 20-54 years and children--						
1-2 and 3-5 years	60.30	74.90	89.50	261.50	324.50	387.40
6-8 and 9-11 years	73.10	91.20	108.90	316.70	394.90	471.60
INDIVIDUALS[3]						
Child:						
7 months to 1 year	8.10	9.90	11.60	35.10	42.80	50.30
1-2 years	9.60	11.80	14.00	41.80	51.10	60.60
3-5 years	11.50	14.20	17.10	50.00	61.70	73.90
6-8 years	15.00	18.70	22.40	65.20	81.20	97.00
9-11 years	18.90	23.60	28.10	81.80	102.00	121.70
Male:						
12-14 years	20.00	24.90	29.80	86.90	108.00	128.90
15-19 years	22.20	27.60	33.10	96.10	119.60	143.20
20-54 years	21.60	27.10	32.50	93.50	117.40	140.70
55 years and over	19.00	23.50	28.00	82.30	101.70	121.50
Female:						
12-19 years	18.10	22.20	26.40	78.40	96.30	114.50
20-54 years	17.60	21.80	25.90	76.20	94.30	112.20
55 years and over	15.90	19.40	23.00	68.70	84.20	99.50
Pregnant	21.70	26.70	31.70	94.10	115.80	137.20
Nursing	23.00	28.60	33.90	99.80	123.90	146.90

[1]Assumes that food for all meals and snacks is purchased at the store and prepared at home. Estimates for each plan were computed from quantities of foods published in the Winter 1975 issue of Family Economics Review. The costs of the food plans were first estimated using prices paid in 1965-66 by households in the South from the USDA's Household Food Consumption Survey with food costs at 3 selected levels. These prices are updated by use of "Estimated Retail Food Prices by Cities" (Atlanta; Baltimore; Washington, D.C.; Maryland; Virginia) released monthly by the Bureau of Labor Statistics.

[2]10 percent added for family size adjustment. See footnote 3.

[3]The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person--add 20 percent; 2-person--add 10 percent; 3-person--add 5 percent; 5- or 6-person--subtract 5 percent; 7-or-more-person--subtract 10 percent.

Cost of food at home for food plans at 3 cost levels, March 1982, Western region[1]

Sex-age groups	Cost for 1 week			Cost for 1 month		
	Low-cost plan	Moderate-cost plan	Liberal plan	Low-cost plan	Moderate-cost plan	Liberal plan
FAMILIES						
Family of 2:[2]						
20-54 years	$44.40	$55.70	$67.10	$192.90	$241.60	$290.60
55 years and over	39.70	49.20	59.00	172.50	213.10	255.60
Family of 4:						
Couple, 20-54 years and children--						
1-2 and 3-5 years	62.80	78.10	94.30	272.70	338.80	408.70
6-8 and 9-11 years	76.20	95.20	115.00	330.60	412.70	498.00
INDIVIDUALS[3]						
Child:						
7 months to 1 year	8.60	10.30	12.60	37.20	44.80	54.60
1-2 years	10.20	12.50	15.00	44.30	54.00	65.20
3-5 years	12.20	15.00	18.30	53.00	65.20	79.30
6-8 years	15.90	19.80	24.00	69.00	85.70	103.80
9-11 years	19.90	24.80	30.00	86.20	107.40	130.00
Male:						
12-14 years	21.10	26.30	31.70	91.40	113.80	137.50
15-19 years	23.00	28.80	34.90	99.90	124.70	151.30
20-54 years	22.30	28.10	34.00	96.80	121.90	147.10
55 years and over	19.70	24.50	29.50	85.60	106.10	127.80
Female:						
12-19 years	18.80	23.20	28.00	81.40	100.40	121.10
20-54 years	18.10	22.50	27.00	78.60	97.70	117.10
55 years and over	16.40	20.20	24.10	71.20	87.60	104.60
Pregnant	22.40	27.60	33.10	97.00	119.70	143.30
Nursing	23.70	29.60	35.40	102.80	128.20	153.40

[1]Assumes that food for all meals and snacks is purchased at the store and prepared at home. Estimates for each plan were computed from quantities of foods published in the Winter 1975 issue of Family Economics Review. The costs of the food plans were first estimated using prices paid in 1965-66 by households in the West from the USDA's Household Food Consumption Survey with food costs at 3 selected levels. These prices are updated by use of "Estimated Retail Food Prices by Cities" (Los Angeles, San Francisco, Oakland) released monthly by the Bureau of Labor Statistics.

[2]10 percent added for family size adjustment. See footnote 3.

[3]The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person--add 20 percent; 2-person--add 10 percent; 3-person--add 5 percent; 5- or 6-person--subtract 5 percent; 7-or-more-person--subtract 10 percent.

Consumer Prices

Consumer Price Index for all urban consumers

[1967 = 100]

Group	Mar. 1982	Feb. 1982	Jan. 1982	Mar. 1981
All items	283.1	283.4	282.5	265.1
Food	283.0	283.3	281.0	272.2
Food at home	277.1	278.0	275.3	268.6
Food away from home	302.4	301.2	299.8	286.1
Housing	306.7	307.3	306.1	282.6
Shelter	327.6	329.5	328.3	301.6
Rent	219.6	218.6	217.8	203.0
Homeownership	365.7	368.7	367.5	336.6
Fuel and other utilities	339.3	337.1	336.2	308.4
Fuel oil, coal, and bottled gas	664.0	683.1	686.0	693.4
Gas (piped) and electricity	375.9	368.7	367.4	326.7
Household furnishings and operation	231.6	230.2	228.4	216.9
Apparel and upkeep	191.1	188.0	187.3	185.1
Men's and boys'	181.7	179.3	178.7	175.0
Women's and girls'	160.3	154.7	154.3	157.5
Footwear	204.9	202.8	202.8	197.4
Transportation	285.1	288.0	289.9	273.5
Private	281.3	284.5	286.6	271.7
Public	336.7	336.8	334.9	293.9
Medical care	318.8	316.2	313.4	284.7
Entertainment	232.8	231.2	229.2	218.2
Other goods and services	252.2	250.3	248.4	228.7
Personal care	243.7	242.3	240.9	226.9

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Postponement of Rebasing of Consumer Price Index

The Bureau of Labor Statistics has postponed the rebasing of the Consumer Price Index to the new U.S. Government 1977=100 reference base (announced in Family Economics Review, Fall 1981, p. 31). The change in base year was to have begun with the release of the January 1982 consumer price data. Postponement was required because of severe budget constraints. No alternative date for adopting the 1977 reference base has been set.

New USDA Publication—Sodium Content of Food

The Department of Agricultural has published a booklet, "The Sodium Content of Your Food," which contains sodium values for 789 foods. Included are beverages, fruits, grains, meats, and vegetables, as well as some over-the-counter drugs.

Consumers who want to control their sodium intake will find the information helpful. Free copies can be obtained by ordering HG-233 from: Consumer Nutrition Center, HNIS, USDA, Room 325A Federal Building, Hyattsville, Md. 20782.

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